OBJECTIVES: To estimate differences in length of stay of co-morbidities, urban and teaching hospitals were and ER visits. Non-whites, patients with higher number and children showed highest hospitalization charges, LOS as compared to children. Medicaid-eligible adults and adult asthmatics had ER visits as compared to asthmatic children. Future studies should be aimed at reducing asthma-related ER visits and investigating variations in resource utilization based on insurance coverage and patient and hospital-related characteristics.

CONCLUSIONS: Adult asthmatics, especially Medicaid beneficiaries, have higher inpatient charges, LOS and ER visits as compared to asthmatic children. Future studies should be aimed at reducing asthma-related ER visits and investigating variations in resource utilization based on insurance coverage and patient and hospital-related characteristics.

RESULTS: Overall, average length of stay for childhood and adult asthma was 2.43 days and 3.98 days, respectively. Mean total charges for childhood asthma was $4,532 as compared to $7,713 for adult asthma. Almost 70% of adult asthmatics had ER visits as compared to 62% of asthmatic children. Adults had significantly higher total charges, LOS and ER visits for all types of payers as compared to children. Medicaid-eligible adults and children showed highest hospitalization charges, LOS and ER visits. Non-whites, patients with higher number of co-morbidities, urban and teaching hospitals were associated with higher charges, LOS and ER visits, for both adult and childhood asthma.

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RESOURCES UTILIZATION FOR INPATIENT ASTHMA CARE IN CHILDREN AND ADULTS: AN ANALYSIS OF HCUP DATA

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OBJECTIVES: To estimate differences in length of stay (LOS), emergency room (ER) visits and charges for inpatient asthma care between children and adults based on insurance coverage, patient and hospital-based characteristics.

METHODS: The 1997 Nationwide Inpatient Sample of the Healthcare Cost and Utilization Project data were used to extract 183,400 childhood (age <17 years) and 251,760 adult asthma cases (primary diagnosis using ICD-9 codes 493.00–493.91). Two-way ANOVA was conducted to determine differences in LOS and total charges between adult and childhood asthma based on type of insurance coverage (Medicaid, private insurance/HMO and self-pay) while chi-square analysis was conducted to detect differences based on number of ER visits. Regression models were developed separately for childhood and adult asthma to examine if LOS and total charges (multiple regression) and ER visits (logistic regression) are affected by patient-related (race, gender, number of co-morbidities and insurance status) and hospital-related (bed-size, location, teaching and ownership status) factors.

RESULTS: Overall, average length of stay for childhood and adult asthma was 2.43 days and 3.98 days, respectively. Mean total charges for childhood asthma was $4,532 as compared to $7,713 for adult asthma. Almost 70% of adult asthmatics had ER visits as compared to 62% of asthmatic children. Adults had significantly higher total charges, LOS and ER visits for all types of payers as compared to children. Medicaid-eligible adults and children showed highest hospitalization charges, LOS and ER visits. Non-whites, patients with higher number of co-morbidities, urban and teaching hospitals were associated with higher charges, LOS and ER visits, for both adult and childhood asthma.

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COST-UTILITY ANALYSIS OF MIDDLE SEVERE ASTHMA WITH SODIUM CROMOGLYCATE AND SODIUM NEDOCROMIL

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OBJECTIVES: Comparative estimation cost and influence on quality of life in children with middle severe asthma sodium cromoglycate and sodium nedocromil.

METHODS: Cost-utility analysis was conducted in Child’s Municipal Asthma-Centre during 1998–2000 years in 100 children with asthma. We determined one year expenses for quality adjusted life years (QALY). For estimation quality of life we used “Childhood questionnaire” by A. West, D. French adapted for Russian by V. Petrov and I. Smolenov and index Rosser-Kind. Estimation of expenditures included direct and indirect expenses.

RESULTS: The investigation revealed the differences in therapeutic effectiveness and quality of life depending on treatment method. Using therapy by nedocromil sodium during one year, the total sum of positive effect on quality of children’s life was 149,8%; health index 0,985 and expenses on drug—3672,3 ± 40,4 roubles. Using sodium cromoglycate these indices were 70,9%; 0,965 and 1862,4 ± 24,2 roubles accordingly. Annual cost of middle severe asthma for one child was 5051,4 ± 68,6 roubles using sodium nedocromil (72,7% expenditures on the drug); using sodium cromoglycate—5044,7 ± 110,4 roubles (36,92%) accordingly. In the second case expenses on QALY were much more—5207,65 in consequence of expenses on hospital care and additional therapy.

CONCLUSIONS: Therapy by sodium cromoglycate of middle severe asthma didn’t provide complete disease control. In this case necessity in additional therapy for improvement quality of life is increased.

ESTIMATES OF THE COST OF ASTHMA IN A EMPLOYER POPULATION

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OBJECTIVES: To estimate differences in length of stay of co-morbidities, urban and teaching hospitals were and ER visits. Non-whites, patients with higher number and children showed highest hospitalization charges, LOS as compared to children. Medicaid-eligible adults and adult asthmatics had ER visits as compared to asthmatic children. Future studies should be aimed at reducing asthma-related ER visits and investigating variations in resource utilization based on insurance coverage and patient and hospital-related characteristics.

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